having the bands and black margins of the wings decidedly broader, and the lobe of the anal angle of the hind wing so much lengthened as to give the wing the appearance of being furnished with three tails. Expanse, 3.80-4.30 inches.

Early Stages.— All we know of these is derived from the brief account given by Schaus in "Papilio," vol. iv, p. 100. Mr. Schaus says that the larva "feeds on laurel."

The insect is Mexican, and only occasionally occurs in Arizona.

(7) Papilio thoas, Linnaeus, Plate XLII, Fig. 4, *$* (Thoas).

Butterfly.—This species is readily distinguished from its near ally, P. *cresphontes*, by the greater and more uniform breadth of the median band of yellow spots traversing both the fore and the hind wing, and by the almost total absence of the curved submarginal series of spots on the primaries. There are other points of difference, but these are so marked as to make the determination of the species easy.

Early Stages.—These have never been fully described, but we know that the caterpillar feeds upon the leaves of the lemon, the orange, and other plants of the citrus group.

P. thoas is not common within the limits of the United States, where it is generally replaced by the following species; but it occasionally occurs in the hot lands of the extreme southern portion of Texas.

(8) Papilio cresphontes, Cramer, Plate XLII, Fig. 3, *$*; Plate II, Fig. 16, *larva;* Plate VI, Figs. 8-10, *chrysalis* (The Giant Swallowtail).

Butterfly.—The principal points of difference between this and the preceding species, its closest ally, have already been pointed out, and are brought into view upon the plate.

Early Stages.—These are quite well known. The caterpillar feeds upon *Ptelea, Xanthoxylon,* and various species *of Citrus.* It is very common in the orange-groves of Florida, where the people call the caterpillar the "orange-puppy," and

complain at times of the ravages perpetrated by it upon their trees. It appears to have been gradually spreading northward, and in quite recent years has appeared at points in the Northern States where before it had never been observed. It has been recently taken in Ontario. It has become rather abundant in the vicinity of the city of Pittsburgh, where no observer had seen it prior to the year